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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,293	10/06/2000	Takehiko Shigefuji	P19894	1800

7055 7590 03/24/2006

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EXAMINER

GOODMAN, CHARLES

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/680,293	Applicant(s) SHIGEFUJI ET AL.	
	Examiner Charles Goodman	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-19 and 21-41 is/are pending in the application.
 - 4a) Of the above claim(s) 15-19 and 23-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) 14, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some * c) ☐ None of:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendment filed on 1/4/2006 has been entered.
2. Applicant asserts that drawing corrections or replacements sheets were filed in the last Amendment filed on 7/15/2005, yet our records do not show such a filing. If the Office is in error, it is respectfully requested that Applicant provide proof of error.
3. Applicant's remarks with respect to claim 20 as having been previously cancelled is noted. The Examiner concedes the oversight and the current Office Action should provide the correct information.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/14/2006 has been entered.

Election/Restrictions

1. Claims 15-19 and 23-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group and Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 12. In addition, the newly submitted claims 39-41 are also withdrawn from consideration since they are directed to a computer readable medium

and subject to the same restriction requirement previously set forth with respect to withdrawn claims 35-38.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 14, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anjo (US 5,046,014) in view of Kamada (US 5,595,560) and Watanabe (US 5,297,022).

Anjo discloses the invention substantially as claimed including, inter alia, identification media (45) on a punch (17) and a punch identification media reader (43, 51). In Anjo, the media identifies both the punch and the corresponding die; hence, Anjo lacks a separate identification reader and arguably a separate identification media for the die. In addition, Anjo lacks a specific reference to a tool storage device that stores the plurality of punches and dies. It is the Examiner's position that the claimed "tool storage device" is inherent in Anjo to the extent that Anjo's punches and dies have to be replaced at some point in time due to wear and these (replacement) tools must be stored in some fashion. It is the corresponding automated interaction/selection between the tools on the support members and the tools in the storage device that is lacking in Anjo.

In that regard, providing a separate reader and identification media for the die are deemed to be an obvious addition to Anjo since the single medium reader as taught by Anjo is capable of reading media from both the punch and the die and since both a

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punch and die are of equal importance in Anjo due to the fact that in a punching operation, the punch and die must work together to punch. Note c. 4, ll. 30-32. To further expand this point, for a given punch of specific design, i.e. dimensions and shape, there must be a corresponding die for that given punch as is well known in the art. For example, one of ordinary skill in the art would not have a punch having a circular punching face with a diameter of 10 mm cooperating with a die having a 15 mm diameter circular opening because that would not allow for the desired punch pattern, i.e. the larger diameter opening causes the typical web material (usually a sheet of metal) to deform in the area of the diameter difference between the punch and die and the resulting punched hole would not be bur free. On the other hand, a die having a 10.1-11 mm diameter circular opening (or any opening within close tolerances that facilitate passage of the punch therethrough) is the die that the ordinarily skilled artisan would associate with the 10 mm punch because this die allows for a substantially bur free punched hole, i.e. the difference in diameters between the punch and the die is substantially small enough to prevent burring (ragged edges in the punched hole opening) during the punching operation. Kamada's teachings illustrate this point. Kamada teaches a die management method for punch presses wherein both the punch (16) and the die (18) have their own separate identification media and this information is read by an identification media reader (40). See c. 5, l. 51 - c. 6, l. 14. At the very least Kamada teaches that an identification reader for a punch may also be used to read a die; that the correlation of, e.g. shape, of the punch is important with respect to the die (c. 6, ll. 19-24); and that having a separate identification media for the die allows for better management of both the punches and dies and combinations thereof. Note e.g. c. 1, ll.

50-62. Moreover, an important teaching with respect to Kamada is that the condition and replacement schedule for the punches and dies are controlled separately, which allows for better management of the tool parts by not having to change the tools when it is not necessary to so perform, i.e. “efficiency”. Furthermore, Kamada teaches utilizing the information read from each of the punches and dies both in the support members and also in a tool storage device (10 - note c. 4, ll. 32-56) to determine and automate the replacement schedules thereof, i.e. “generating an NC program...”, the information being the same type of information that Anjo reads. Therefore, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the method of Anjo with an additional reader, albeit for the die and a separate identification media for the dies and a tool storage device for the replacement tools as taught and suggested by Kamada in order to facilitate enhanced tool exchange management of the punches, dies and combinations thereof, since with respect to the separate reader it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding the “minimizing” and “efficiency” aspect in the claims, these are deemed to be obvious parameters in which the ordinarily skilled artisan takes into consideration when operating the punching processes although Anjo, alone or modified, may lack specific references to this feature. Moreover, such minimizing is inherent in Anjo because according to Applicant’s disclosure, tool replacements are minimized merely by allowing the control to select the tools mounted on the turret. Note Application Specification, p. 24, ll. 2-5. In line with the instant application definition, then Anjo, alone or modified, inherently performs the same due to the fact that each of

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the punches and dies are identified on the turret and the operator selects the combinations proper for the operation. Note c. 3, ll. 5-9 and c. 4, ll. 22-29. To underline this point, Watanabe teaches that it is old and well known in the art that in programming a machining operation, minimizing tool changing operations is a well known programming feature to the ordinary artisan, all in the name of efficiency. Note c. 4, l. 63 - c. 5, l. 25 with specific reference to c. 5, ll. 10-13. Therefore, since it has been argued that Anjo lacks this feature, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the modified method of Anjo with the programming step of minimizing the number of punch and die replacements as taught and suggested by Watanabe in order to facilitate efficient operation of the punch press by maximizing tool usage.

Response to Arguments

4. Applicant's arguments with respect to claims 14, 21, and 22 have been considered but are moot in view of the new ground(s) of rejection to the extent that the rejection addresses the amended portions of the claim. However, the following response is deemed necessary.

In response to Applicant's basic argument that the combination would not have resulted in the claimed invention in pp. 16-17 of Applicant's response, this argument is traversed. Initially, it appears that Applicant is arguing that the combination do not include all the limitations of the added portions of claim 14. It is not clear how to the extent that while Anjo arguably may not explicitly include some of those limitations, Kamada teaches substantially the same method of managing the "tools" in a punch press

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in substantially the same manner as Applicant. More specifically, Kamada teaches that all the identifying information for the punches and dies, both in the press and in the storage magazine, are read and compiled in a computer. That data is used to determine, via a program, the frequency of tool replacements, i.e. management of tool exchange. Kamada's teachings are desirably applicable to and obvious in the eyes of the ordinary artisan for application in Anjo's invention to automate the inherent tool replacements required in Anjo's invention.

Conclusion


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Goodman whose telephone number is (571) 272-4508. The examiner can normally be reached on Monday-Thursday between 7:30 AM to 6:00 PM EST.

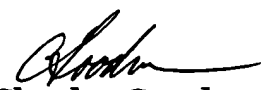
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap, can be reached on (571) 272-4514. In lieu of mailing, it is encouraged that all formal responses be faxed to (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

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March 20, 2006


Charles Goodman
Primary Examiner
AU 3724

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